

**Written Testimony of Michael G. Harris, P.E., Harris Management Services LLC
Earth Charter of the Lower Valley, Inc.
Before the Connecticut General Assembly Energy and Technology Committee March 10, 2009**

Michael G. Harris
40 Orchard Road
East Haddam, CT 06423

My name is Michael Harris. I'm from East Haddam, Connecticut. This testimony is in support of House Bill 6635. I represent my family, town and future generations of Connecticut residents. I am a licensed, professional engineer, the owner of Harris Management Services LLC, and the incoming President of the group known as ECCoLoV, the Earth Charter Community of the Lower Valley, Incorporated.

I appreciate the opportunity to provide this testimony. I believe this bill has broad support from the community. (1) It sets a robust long-term goal – a vision of the deployment of solar energy in our state to meet 5% of our needs. This is something we desperately need now. Although it is still not big enough, it does offer a significant step in the right direction, and an excellent starting point.

The bill seeks to repair the damage done by the boom-bust cycles of the current residential rebate program by making a commitment to solar's role in our energy economy - and allowing for longer term business planning and the creation of stable, green jobs. The bill removes competition between residential programs and large scale projects – a key to providing stability, predictability and fairness to the program

I'd like to emphasize the value of the bill's provisions for community solar and incentives for solar installations on underutilized, appropriate land. These provisions in particular address the pressing need to build resiliency in our communities so they may cope with the profound changes of the next few years. The bill wisely provides for the scaling down of incentives over time as solar PV becomes more competitively priced due to acceptance and economy of scale.

No bailout package can compare, nor can any enhancement to the status quo come close to the improved footing a broad-based solar initiative will provide to the citizens of the State of Connecticut as we move into a far different energy economy in the not-too distant future. This bill supports a safe, secure, decentralized energy infrastructure including relief for burdened transmissions lines. Solar PV generates energy where it is used and during the peak demand periods of the day.

We are currently on the slippery down side of a resource cliff in which energy returned barely justifies energy invested. We are moving ever more quickly toward a situation in which energy and resources will not be available. We must do the very best we can with what is left, and we must do it in a very short timeframe. Your job as leaders is to improve the resiliency of our communities. There is nothing more or better that we can do for the citizens of Connecticut.

My personal experience with the current rebate programs includes a residential client that was left stranded after investing in the development of a solar PV system for their home in Moodus, Connecticut. Prior to going to contract on the project, the program ran short of funds. My client justifiably felt betrayed. Moreover, I work directly supporting a qualified solar contractor who has likewise invested significantly in a Connecticut-based business offering solar PV installations. This firm, despite its commitment to working in our state, has also been left stranded with the sudden

withdrawal of the program. The lack of planning that lead to this disruption in the program is irresponsible. Bill 6635 could be improved by adding additional means of guaranteeing transparency and accountability by any individuals or organizations charged with management of the various programs.

This is not just a story about high energy costs or energy independence. It is about resource depletion and economic collapse brought on by the convergence of the exponential growth of population, consumption and debt. The unfolding crisis is ripe with opportunity to change the unsustainable nature of our systems and the character of our institutions. This bill offers a vision as a map for the role that solar can and should play in the unfolding future; a future that we can not even envision, yet must come to grips with as changes sweep over us. While it is certain that we can not support unmitigated increases in the standard of living for everyone on Earth, we can most certainly provide for a high quality of life. Solar energy is a cornerstone of enhanced quality of life, consistent with ideals of local energy independence, reduced environmental burdens, and real social and economic justice.

We need solar now to help provide the basics of life in the future; to take up the slack where formerly cheap, surplus energy was available to provide for the growth of economies and improvements in living standards. Stability, quality of life, fair share, interdependency and ecological relationship – these characterize the reality with which we must come to grips.

Our current systems and institutions are not working. So this bill requires utilities to purchase increasing amounts of solar power over time. Until we decouple utility profits from increased sales of energy, this is the next best thing we can do. The bill is a measured response to the far reaching changes that are imminent. Its goal of 370 MW provides some 8,400 jobs, most of which have the essential element of being local – an attribute not to be underestimated for its pertinence.

5% solar by 2020 will make us a leader in the country – we need 10% by 2015, but this is a good first step. A fundamental shift is needed now; there is no time left. We must let go of old ideas about trying to make old systems and ways of thinking work. We are about to be over swept by a tidal wave of change. This bill provides a modicum of footing for that new world - just a few years away, if that.

The wise leader will allow for failure in the face of doing nothing. Far from failing, this bill asks that we take a step into the unknown. That step into the unknown is no longer a polite request, it is an imperative. This will become clear as the year 2009 unfolds. The cost of doing nothing is exponentially greater every day. This isn't a perfect bill; it has too much emphasis on working solar into an unworkable status quo. Energy efficiency must overshadow our thirst for new capacity because the capacity simply is not going to be sustainable. It is our fear of failure that keeps us wishing the old ways would soon work again when the fact is, they will not.

We are off the edge of the cliff of exponential curves where energy returned on energy invested will not ever again come close to the surplus energy we've enjoyed for the last 100 years. This has the most far reaching consequences imaginable. In fact, it changes the foundational assumptions of our economy, something we are incapable of imagining. Yet we will deal with it, and soon. Please pass this bill as soon as possible and get on to more good – pertinent – work helping build community resiliency and truly taking care of the people of Connecticut by addressing the fundamental changes being thrust at us.